



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,086	08/29/2006	Guenter Ries	2005P00312W0US	7789
46726 7590 05/14/2008 BSH HOME APPLIANCES CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 100 BOSCH BOULEVARD NEW BERN, NC 28562				
EXAMINER BARRERA, RAMON M				
ART UNIT 2832		PAPER NUMBER		
MAIL DATE 05/14/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/591,086

**Applicant(s)**

RIES, GUENTER

**Examiner**

RAMON M. BARRERA

**Art Unit**

2832

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-31 is/are allowed.
- 6) ☒ Claim(s) 14-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/CS-100)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_
- Paper No(s)/Mail Date 8/29/06

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 14, 18, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Togashi Hitoo(JP2000-253640), et al., cited on applicant's IDS.

Hitoo in figs. 2 and 7 disclosed a linear drive device comprising an excitation winding (3,14) producing a variable magnetic field and including an associated magnetic-flux-carrying main yoke body (2,12) having pole surfaces having multiple and a center limb; a winding-free counter yoke body; an axial gap formed between the main and counter-yoke bodies; an armature body (4,22) including a magnet carrier having at least two permanent magnet parts (24,26) and an axial oscillation movement being transferable to the at least two permanent magnet parts by the variable magnetic field of the excitation winding.

3. Claims 14, and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hitoo Togashi(JP2000-224829), et al., cited on applicant's IDS.

Hitoo in figs. 4-7 disclosed a linear drive device comprising an excitation winding 14 producing a variable magnetic field and including an associated magnetic-flux-carrying main yoke body 12 having pole surfaces having multiple and a center limb; a winding-free counter yoke body; an axial gap formed between the

main and counter-yoke bodies; an armature body 20 including a magnet carrier having at least two permanent magnet parts (20a,20b) and an axial oscillation movement being transferable to the at least two permanent magnet parts by the variable magnetic field of the excitation winding.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Togashi Hitoo, cited above, in view of Huth(EP0915553), cited on applicant's IDS.

Hitoo disclosed the claimed invention except for pole shoes on the respective limbs. Huth disclosed a linear motor with pole shoes, an equivalent structure known in the art. Therefore, because these two pole structures were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to employ pole shoes on Hitoo's main yoke limbs as taught by Huth.

6. Claims 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Togashi Hitoo, cited above, in view of McGill, et al.(US2003/017384), newly cited.

Hitoo disclosed the claimed invention except for wherein the armature body is rigidly connected to a pump plunger of a compressor. McGill, et al., disclosed a similar

actuator having an armature body connected to a pump plunger 11 of a compressor. Therefore, because these two actuators were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to connect a pump plunger of a compressor to Hitoo's armature.

***Allowable Subject Matter***

7. Claims 22-31 are allowed.
8. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art of record taught or reasonably suggested a linear drive device comprising a main yoke body accommodating the excitation winding and having multiple limbs including a central limb and lateral limbs; a winding-free counter-yoke body disposed opposite to the main yoke body; the main yoke body and the counter-yoke body forming a common yoke body with common lateral limbs, the central limb of the main yoke body having an axial width dimension at a pole surface facing an armature body, the axial width dimension being at least as large as the axial extension dimension of each of the at least two magnet parts of the armature.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAMON M. BARRERA whose telephone number is (571)272-1987. The examiner can normally be reached on Monday through Friday from 11 to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2832

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ramon M Barrera/  
Primary Examiner, Art Unit 2832

rmb